

DETAILED ACTION

Status of the Claims

1. This action is in response to papers filed February 06, 2009 in which claims 1 and 10 were amended and claims 18-20 were canceled. The amendments have been thoroughly reviewed and entered.

The previous rejections in the Office Action dated August 07, 2008 are withdrawn in view of the amendments. Applicant's arguments have been thoroughly reviewed but are deemed moot in view of the amendments, withdrawn rejections and new grounds for rejection. New grounds for rejection, necessitated by the amendments (i.e., optical detector and positive recitations of the rotating body in claim 1), are discussed.

Claims 1, 3-6, 8-17 are under prosecution.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-6, 8-12 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Vandenberg et al., (US Patent No. 3,709,598), hereinafter "Vandenberg".

Vandenberg teaches an analyzing device, comprising:

a rotating body 24 for transferring a target analyte 25; and
an optical detector 88 for optically analyzing the target analyte.

Vandenberg also teaches the rotating body for holding the target analyte by applying a negative pressure to the target analyte while transferring the target analyte in a circumferential direction of the rotating body.

The rotating body of Vandenberg including an inner space (chamber) for negative pressure application, a plurality of positioning portions (grooves 28), each for placing and holding the target analyte, and through-holes 30 for connecting the positioning portions and the inner space (see entire document, in particular col. 7, lines 36 et seq.).

Vandenberg teaches the inner space of accommodating a blockade member 60 for selectively closing or opening the through-holes by movement relative to the rotating body in clockwise direction.

As to claim 3, Vandenberg teaches a negative pressure generator (suction device) for applying the negative pressure to the inner space (see col. 7, line 36 et seq.)

Regarding claim 4, Vandenberg teaches the rotating body includes a rotary axis extending insubstantially horizontal direction as seen in Fig. 2. Note the vertical and horizontal directions of the device have not been positively recited or related to other elements of the device.

With respect to claims 5-6, the rotating body of Vandenberg is formed as a cylinder having an outer surface formed with the positioning portions (grooves 28) that extend in an axial direction of the rotating body and are spaced from each other in a circumferential direction of the rotating body (see Fig. 3).

As to claim 8, Vandenberg teaches the blockade member extends in an axial direction of the rotating body and is formed with a cutout extending in the axial direction (see Fig. 3).

With respect to claim 9, Vandenberg teaching a housing 25 for accommodating at least a part of the rotating body, wherein one end of the blockade member is non-rotatably supported by the housing (see Fig. 3).

Regarding claim 10, the blockade member of Vandenberg is opened to the through-hole connected to the positioning portion on which the target analyte is placed at the optical detector 88.

As to claims 11-12 are directed to the operation of the device. Apparatus claims must be structurally distinguishable from the prior art in terms of structure, not function. The manner of operating an apparatus does not differentiate an apparatus claim from the prior art, if the prior art apparatus teaches all of the structural limitations of the claim (see MPEP § 2114 & § 2173.05(g)). Nevertheless, the target analyte of Vandenberg is transferred by rotating the rotating body clockwise 180 degrees from a load position 19 to a reject position, see Fig. 3. The target analyte is transferred from a position at which the target analyte is placed at the positioning portion to the position for measurement by the optical detector 88. The blockade member closes the through-hole connected to the positioning portion at a position where the target analyte is placed on the positioning portion, thereby preventing the target analyte from being subjected to the negative pressure at rejection position 66.

Regarding claim 15, Vandenberg teaches a suction applying clearance (area between rollers 26) provided between positioning portion (groove 28) and the through-hole 30 connected to the positioning portion. The suction applying clearance applying the negative pressure on the target analyte in an area extending in an axial direction of the rotating body.

With respect to claim 16, wherein the suction applying clearance of Vandenberg is formed by a recess smaller than each positioning portion adjacent to a disposing portion and closer to an axis of the rotating body (see Fig. 3).

Regarding claim 17, note that the recited target analyte is not considered as part of the claimed structure of the analyzing device and is therefore not given patentable weight. For apparatus claims, if the prior art structure is capable of performing the intended use, then it meets the claim. Apparatus claims must be structurally distinguishable from the prior art in terms of structure, not function. See MPEP § 2114 & § 2173.05(g).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vandenberg (US Patent No. 3,709,598) in view of Kazuhiko (JP 06/323997).

The teachings of Vandenberg have been summarized previously above.

Vandenberg does teach removing the target analyte held on the positioning portion via pressurized air from passages 67, 68; however, Vandenberg does not teach using a blade for removing the target analyte held on the positioning portion or a guide portion on the rotating body for allowing the blade to move relative to the rotating body.

Kazuhiko does teach a rotating body 3 for transferring a plurality of target analytes 4 and a plurality of positioning portions (i.e., recesses) sized to receive the target analytes 4. Kazuhiko also teaches a detector 25 for analyzing the target analyte. Kazuhiko uses a blade 26 for removing the target analyte held on the positioning portion on the rotating body (see for example paragraph [0017] of machine generated English translation). As shown in Fig. 3, each positioning portion includes a guide portion (i.e., chamfered edge) that allows the blade to remove the target analyte from the positioning portion.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to have substituted the pressurized means of removing the analytes from the recess of the rotating body taught by Vandenberg with the blade of Kazuhiko since this would eliminate the need for additional passages in the rotating

body dedicated to pressurized air supply, thereby, simplifying the design of the analyzing device.

Conclusion

7. No claims are allowed.
8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to P. Kathryn Wright whose telephone number is 571-272-2374. The examiner can normally be reached on Monday thru Thursday, 9 AM to 6 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PKW

/Jill Warden/
Supervisory Patent Examiner, Art Unit 1797